## Message

From: Hig Ex. 6 PII, Bretwood Higman Sent: 6/27/2012 8:48:00 PM

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To: Phil North/R10/USEPA/US@EPA

**Subject**: Re: Seismicity section

Attachments: hig314@gmail.com; North.Phil@epamail.epa.gov; (907) 714-2483; north.phil@epa.gov;

Ex. 6 PII, Bretwood Higman

Ex. 6 PII

Ex. 6 PII www.groundtruthtrekking.org; www.nukaresearch.com;

http://groundtruthtrekking.org/Reports/Faulthunt2010Terracedeformation/1/Background/; hig314@gmail.com;

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http://groundtruthtrekking.org/Reports/Faulthunt2010Terracedeformation/1/Background/

Hi Phil,

One quick question for you: I have been conducting my own fieldwork in the area, and earlier this month came across evidence of strong shaking and possible tectonic deformation SW of the mine site, possibly associated with the Lake Clark Fault. These results are preliminary, and I hope to work toward a peer-reviewed publication over the coming 6-8 months. In the short term (before the comment deadline), I could produce an extremely short "preliminary field report" that summarized my primary lines of evidence. I could reference that in my comments, and include the report as well. Given this report would not have gone through formal peer-review, would it be of any use to the EPA?

-Hig

On Wed, Jun 27, 2012 at 11:21 AM, Hig Ex. 6 PII, Bretwood Higman wrote: Thanks Phil, sorry I missed this in my too-quick search of the document.

I just gave it a quick read. It's not as bad as what Pebble did at least - no weird lines of geological reasoning. I'll provide detailed comments, but a couple quick thoughts:

Though it's not pushed as far here as in the EBD, the language suggests that lack of evidence constitutes some sort of evidence of non-activity on the LCF. Really the EPA should rely on Koehler's 2011 pub where he clearly states we don't know what the situation is in this area. For example, I don't think there's any value reporting the 16 km distance between the end of Haeussler & Saluts (2004) mapping of the LCF and the mine site. That was simply the end of their dataset, and it's clear the fault must go further because at the end of their dataset there's still 26 km offset, and that strain has to be distributed somewhere.

The review of the braid-scarp doesn't need to come in here at all. This is one tiny spot in a huge landscape, and it's not a fault (and was never reported to be a fault, though I did write a preliminary report identifying it as a possible fault). Lots of places aren't faults. The weight that both the EBD and the Watershed Assessment put on this report is unfortunate, since it doesn't actually provide any useful new science.

I think that the basic structure is all right, and I'll work to make my comments the sort of thing that can be addressed in a straightforward manner.

-Hig

On Wed, Jun 27, 2012 at 10:44 AM, Phil North < North. Phil@epamail.epa.gov> wrote: Bret,

It was good talking with you. The seismicity section in on page 4-38

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"To protect your rivers, protect your mountains." Hig (Bretwood Higman, PhD) Ex. 6 PII, Bretwood Higman Ex. 6 PII Ground Truth Trekking (www.groundtruthtrekking.org) Nuka Research (www.nukaresearch.com) Geological Hazards (http://groundtruthtrekking.org/Reports/Faulthunt2010Terracedeformation/1/Background/) Hig (Bretwood Higman, PhD) Ex. 6 PII, Bretwood Higman

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